DETAILED ACTION

Amendments made June 20, 2011 have been entered;
Claims 1, 3-10, 13-16, 18, and 19 remain pending.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The 112 second paragraph rejection of claims 1, 3-10, and 13-19 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention have been withdrawn in light of applicant's amendments and arguments made June 20, 2011, specifically, page 10 of the remarks clarifies the meaning of internal roller cavity.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The 103(a) rejection of claims 1, 3-10, 13-16, and 18 as being unpatentable over) Ezaki (JP App # 60230711 as translated) in view of the combination of Hui (ed.) (Dairy Science and Technology Handbook pages 251 and 251) and Martinez et al (EP 0864256 A2) has been withdrawn in light of applicant's amendments and arguments made June 20, 2011; Specifically it appears that the expansion of a frozen aerated product would be inhibited in the process of Ezaki.

The 103(a) rejection Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over) Ezaki (JP App # 60230711 as translated) in view of Hui (ed.) (Dairy Science and Technology Handbook pages 251 and 251) has been withdrawn in light of applicant's amendments and arguments made June 20, 2011; Specifically it appears that the expansion of a frozen aerated product would be inhibited in the process of Ezaki.

Claims 1, 3-10, 13-16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leadbeater (EP 0923875 B1) in view of the combination of Hui (ed.)

(Dairy Science and Technology Handbook pages 251 and 251) and Martinez et al (EP 0864256 A2), and as evidenced by Ezaki (JP App # 60230711 as translated) and as evidenced by Answers (http://wiki.answers.com/Q/What_is_the_density_of_ice_cream page 1).

Leadbeater teaches a method for making food articles, in particular confections, using counter rotating rollers (title and paragraph 0001). Leadbeater teaches that the method comprises providing a pair of parallelly arranged rollers with internal roller cavities and having cavities defined in their outer cylindrical surface and providing depositors for depositing liquid food onto said rollers; depositing liquid food into the cavities on a first roller to provide a first separate part of a food article, depositing with a different depositor the liquid food cavities on the second roller to provide a second separate part of a food article, wherein the rollers are cooled so that the separate parts at least partially solidify at the outside of the product before being joined while still capable of sticking to one another; and counter rotating the rollers and joining the parts by the pressure they are subjected to when the roller surfaces are moved toward one another in the nip which is the point where the surfaces of the rollers are the closest (paragraphs 0008, 0011, 0021-0024, 0026, and 0028). Leadbeater teaches that the mold material is outside the mold cavity and uninhibited after filling (Figures 1 and 2). Leadbeater teaches that by such a method the capacity of the rollers may be increased by as mush as 100% when compared to a conventional system (paragraph 0019).

Leadbeater is silent to the confection as a frozen aerated product as recited in claims 1 and 13, preferably an ice cream as recited in claims 18 and 19, with an overrun of between 30 and 130% as recited in claims 1 and 13, preferably above 45% and 130% as recited in claim 16, to the roller surface as cooled to below -80C with a refrigeration medium as recited in claims 1 and 13, preferably below -100C as recited in claim 14, wherein the medium is liquid nitrogen as recited in claim 15, to the confection as allowed to expand outside the open mold cavity, wherein the expansion of the confection is uninhibited from after the filling device to where the confection within the cavities are pressed against one another as recited in claims 1 and 13, to the molds rotated at variable rotational speeds as recited in claim 4, and to the location of the

molds at the minimum and maximum rotational speed of the mold as recited in claims 5-10,

Hui discloses of novelty equipment utilized for ice creams. Hui teaches that the sales performance of novelties has been and continues to be strong. Hui teaches that ice cream products for filling molds must be very fluid so that they will mold quickly, and thus, partially frozen ice cream is drawn from the freezer so warm when filling molds that it is near its initial freezing point (25F or -4C) (page 251). Hui teaches the process of filling molds with expanded ice cream products (i.e. ice cream with overrun) is performed at high speeds. Hui teaches that with molding, a pump arrangement is included. Hui teaches that when pumping it is effective to produce a product that melts more slowly and retains more overrun. Hui teaches of a savings for a 2.75 fluid ounce bar (i.e. mould) at a 65% overrun. Refer specifically to Pages 251 and 252.

Martinez et al (Martinez) teaches a process for the manufacture of frozen ice confections, including ice creams, in a split molds (abstract paragraph 57 and page 2 lines 47-48). Martinez teaches that the molds, i.e. the forming elements, are pre-cooled to below -50C, including below -100C by the use of a cryogenic liquid, typically nitrogen, being introduced into the mold cavity (abstract and page 3 lines 3-12). Martinez teaches that the cooled mold allows for ready release of the confectionary product from the mold (page 2 lines 10-21).

Regarding the confection as a frozen aerated product, preferably an ice cream, as evidenced by Ezaki, it was known to mold frozen confections in counter rotating rollers. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the confection as taught by Leadbeater to be a frozen aerated confection, including an ice cream, in order to form a novelty item, which were known to have strong sales performance as taught by Hui. To use a known confectionary material, i.e. a frozen confection, in apparatus which was known for the said confectionary as evidenced by Ezaki, and in a process which was intended for confections would have been obvious and routine determination to one of ordinary skill in the art. Specifically regarding the food as liquid when deposited into the rollers, as taught by Leadbeater, since Hui teaches that ice cream products for filling molds must

be very fluid so that they will mold quickly, and thus, partially frozen ice cream is drawn from the freezer so warm when filling molds that it is near its initial freezing point, one of ordinary skill in the art would have a reasonable expectation of success and the knowledge to use a frozen confection ice cream in the process of Leadbeater.

Regarding the overrun percentage as 30-130%, preferably from 45-130%, it would have been obvious to one skilled in the art at the time the invention was made to include an overrun of 65% since Hui teaches that overrun ice cream products which are molded and extruded at 65% increase the amount of the final product (or save a portion of the product that could be lost). To select a particular percentage of overrun would have been obvious depending on the particular degree of savings desired.

Regarding the roller surface as cooled to below -80C with a refrigeration medium, preferably below -100C, wherein the medium is liquid nitrogen, Leadbeater teaches that the rollers are chilled for the purpose of solidifying the confection. It would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the forming elements by using liquid nitrogen until a cavity temperature of below -50C, including below -100C, was achieved in order to keep the confectionary products frozen and allow for easy release of the confectionary product from the mold as taught by Martinez. One would have been further motivated to use liquid nitrogen to cool the forming elements since Martinez teaches that liquid nitrogen is typically used to cool the molds and thus one of ordinary skill in the art at the time the invention was made would expect that the liquid nitrogen be readily available and affordable.

Regarding the confection as allowed to expand outside the open mold cavity, wherein the expansion of the confection is uninhibited from after the filling device to where the confection within the cavities are pressed against one another, as discussed above, in the practice of the process of Leadbeater with a frozen confection, the process would include filling of the molds near the freezing point of the ice cream as suggested by Hui, and then cooling the frozen confection to achieve partial solidification wherein there is no inhibitor as suggested by Leadbeater. As evidenced by Answers, frozen confections, such as ice cream will expand during freezing, thus in the process as taught by the references, the confection would naturally expand. As Leadbeater

teaches and shows that the material to be molded is applied outside the cavity, the natural expansion of the frozen confection would include expansion outside of the open mold cavity. It is noted that applicant claims that the confection is “allowed" to expand and does not require any steps to provoke or excite the expansion; it would thus be an inherent property of the confection or ice cream to expand when allowed. Applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of both the rollers at a stop or minimum speed when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop both the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, etc) and so that the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity and bond to one another. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the molding cavity. To determine appropriate rotation speed of a circular mold for filling depending on the molding apparatus and filling to be molded would be routine practice of one of ordinary skill in the art at the time the invention was made.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-10, 13-16, 18, and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as not patentably distinct from claims 1, 3, and 4 of commonly assigned copending Application No. 11/891,208 ('208) as amended July 8, 2010.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both are directed towards a process of manufacturing frozen aerated products comprising providing two separate forming elements with forming cavities, filling the two open cavities with a product having an overrun within the range 30-130%, allowing the product to expand outside the cavity, then moving the two open cavities opposite one another so that the product of one cavity is pressed against the product of the other cavity wherein the forming elements in the mold at a temperature below -80C and are cooled with liquid nitrogen. The only difference is '208 does not

teach the temperature at which the product is when filled into the cavities, the frozen aerated product as ice cream, or the rotation of the rollers.

Regarding the frozen aerated confection as ice cream, as ice cream was a well known frozen aerated confection, the claims of '208 which recite a frozen aerated confection encompass an ice cream. Furthermore, to use a known frozen aerated product, including ice cream, would have been obvious to one of ordinary skill in the art.

Regarding the temperature at which the product was filled into the cavities, it was known in the art at the time the invention was made for frozen confections to be filled at about -7C. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fill the frozen product into the mold at a temperature that was known in the art and would allow the product to be molded, i.e. would not be too stiff or frozen, but at which the product would not melt. To do so would be routine determination of one of ordinary skill in the art at the time the invention was made and would be a result effective variable based upon the composition of the confection and would not impart a patentable distinction to the claims.

Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of the rollers at a stop when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, ect) and so that the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the molding cavity. To do so would be routine practice of one of ordinary skill in the art at

the time the invention was made and would not impart a patentable distinction to the claims absent any clear and convincing arguments and/or evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to the prior art rejections have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY BEKKER whose telephone number is (571)272-2739. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kelly Bekker/
Primary Examiner
Art Unit 1781